REMARKS

This Amendment is submitted in response to the Official Letter dated March 26, 2004. Claims 7, 9 and 14 have been amended. Claims 1 through 6, 8, 18 and 19 have been cancelled. The application now includes claims 7, 9 through 17, 20 and 21, with claims 7, 9 and 14 being independent claims. Favorable reconsideration of the application, as amended, is respectfully requested.

In the Official Letter, the Examiner objected to the drawings. Applicant has enclosed three (3) replacement drawing sheets that include corrected drawings in which block elements 10, 26, 28, 48, 50, 68, 70, 86, 88 and 94 are labeled. Accordingly, applicant respectfully requests that the Examiner withdraw his objection to the drawings.

The Examiner also objected to the Abstract as not being directed to the claimed invention. Applicant has amended the Abstract to describe the claimed invention and respectfully requests that the Examiner withdraw his objection to the Abstract.

The Examiner further objected to the disclosure for not giving the current status of the parent application. Applicant has amended the Cross Reference to Related Applications paragraph to state the current status of the parent application. Accordingly, applicant respectfully requests that the Examiner withdraw his objection to the disclosure.

In the Official Letter, the Examiner rejected claims 1 and 5 through 7 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,784,237 to Condne et al. The Examiner stated that the Condne et al. reference discloses a sense element 20 mounted on a base member 16, and a plurality of signal conditioning circuits 36 and 40 connected to the sense element. Regarding claim 7, the Examiner stated that high frequency angular acceleration is a "first range of acceleration change" and low frequency angular acceleration is a "second range of acceleration change".

Applicant has cancelled claims 1 and 6 and rewritten claim 7 in independent form to include all of the limitations of base claim 1 and intermediate claim 6. Additionally, rewritten independent claim 7 recites a plurality of signal conditioning

circuits connected to said single linear acceleration sensor with each of the signal conditioning circuits adapted to be connected to an associated control device. Rewritten claim 7 also recites that each of the signal conditioning circuits is operable to generate an electrical signal that is a function of the change in linear acceleration of a body. Rewritten claim 7 further recites that a first one of the signal conditioning circuits is calibrated to sense a first range of linear acceleration change and a second one of said signal conditioning circuits is calibrated to sense a second range of linear acceleration change that is different from the first range of linear acceleration change, whereby a different output signal is supplied to each of the associated control devices. The recited limitations of rewritten claim 7 are illustrated by Fig. 2 of the application.

The Condne et al. reference discloses a device described in column 4, lines 3 through 8 as:

> In Fig. 4, a block diagram is shown in which the above-described sensor is indicated at 35. Its output signal, which corresponds to a *superposition of position and angular acceleration*, is separated, that is filtered, into the two variables of angular acceleration and location, so that the driving situation can be evaluated. (emphasis added)

The applicant believes that the Condne et al. reference discloses a device for determining angular velocity and angular position of a vehicle, as illustrated in Fig. 4 of the reference. Nothing in the Condne et al. reference shows or suggests a single linear acceleration sensor connected to a plurality of signal conditioning circuits that are operable to generate linear acceleration signals in different ranges as recited in rewritten independent claim 7. Indeed, by disclosing a rotational motion measurement, applicant believes that the Condne et al. reference actually teaches away from the structure recited in rewritten independent claim 7. Accordingly, applicant believes that rewritten independent claim 7 is patentable over the Condne et al. reference and respectfully requests that the Examiner withdraw his rejection of the claim.

The Examiner also rejected claims 1 and 5 through 7 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,386,040 to Broillet et al. The Examiner stated that the Broillet et al. reference discloses a sense element 31 mounted on a base member, namely, a rotary machine, and a plurality of signal conditioning circuits 33 and 34 connected to the sense element. Regarding claim 7, the Examiner stated that high frequency angular acceleration is a "first range of acceleration change" and low frequency angular acceleration is a "second range of acceleration change".

Applicant believes that the Broillet et al. reference discloses a device that combines two signals into a single signal, E_s, as illustrated by the summing integrators 40, 60 and 90 shown in Figs. 2, 3 and 6, respectively, of the reference. Therefore, nothing in the Broillet et al. reference shows or suggests supplying two different output signals to associated control devices as recited in rewritten independent claim 7. Indeed, by combining the signals, applicant believes that the Broillet et al. reference actually teaches away from the structure recited in rewritten claim 7. Accordingly, applicant also believes that rewritten independent claim 7 is patentable over the Broillet et al. and respectfully requests that the Examiner withdraw his rejection of the claim.

Claims 10 through 13 and 20 are dependent upon rewritten independent claim 7 and include the limitations recited therein. Accordingly, for the reasons given above, applicant also believes that claims 10 through 13 and 20 are patentable over the art of record and respectfully requests that the Examiner withdraw his rejection of the claims.

The Examiner further rejected claims 1 and 5, 8 and 9 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,925,643 to Roantree et al. The Examiner stated that the Roantree et al. reference discloses a sense element 72 mounted on a base member, namely, a space vehicle, and a plurality of signal conditioning circuits 106 and 112 connected to the sense element. Regarding claim 9, the Examiner stated that high frequency angular acceleration is a "first range of acceleration change" and low frequency angular acceleration is a "second range of acceleration change".

Applicant has cancelled claims 1 and 8 and rewritten claim 9 in independent form to include all of the limitations of base claim 1 and intermediate claim 8 in a manner similar to rewritten claim 7 above. Rewritten independent claim 9 recites a plurality of signal conditioning circuits connected to a single angular rate sensor, with each of the signal conditioning circuits adapted to be connected to an associated control device and operable to generate an electrical signal that is a function of the change in angular velocity of a body. Rewritten claim 9 also recites that a first one of the signal conditioning circuits is calibrated to sense a first range of angular velocity change and a second one of the signal conditioning circuits is calibrated to sense a second range of angular velocity change with the second range of angular velocity change being different from the first range of angular velocity change, whereby a different output signal is supplied to each of the associated control devices.

Applicant has carefully reviewed the Roantree et al. reference and notes that the reference discloses in column 7, lines 30 through 34, that:

> The output from the high pass filter 112 is fed to a summing junction 114 where it is combined with the output from the demodulator and low pass filter 106 to produce a signal representing the output from a drift free gyro.

Applicant believes that the Roantree et al. reference teaches elimination of gyro drift error by combining two signals derived from a gyro into a single output signal. Nothing in the Roantree et al. reference shows or suggests supplying two different output signals to associated control devices as recited in rewritten independent claim 9. Indeed, by combining the signals, applicant believes that the Roantree et al. reference actually teaches away from the structure recited in rewritten claim 9. Accordingly, applicant also believes that rewritten independent claim 9 is patentable over the Roantree et al. reference and respectfully requests that the Examiner withdraw his rejection of the claim.

The Examiner also objected to claims 14 through 17 and 21 as being dependent upon a rejected base claim but stated that the claims would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening claim. Accordingly, applicant has rewritten claim 14 in independent form to include the limitations of base claim 1 and intervening claims 8 and 9. Furthermore, claims 15 through 17 and 21 are dependent upon rewritten independent claim 14. Accordingly applicant respectfully requests that the Examiner allow claims 14 through 17 and 21.

In view of the amendments and above remarks, it is believed that the application is in condition for allowance.